

DEDICATED
TO SCIENTIFIC
RESEARCH AND
EDUCATION,
INSPIRING
RESPECT FOR
THE NATURAL
WORLD

ACADEMY

Newsletter



Namibia

A NATURAL HISTORY OF AFRICA'S NEWEST NATION

Namibia, formerly known as South West Africa, was once governed by German and South African regimes and is Africa's newest nation — gaining independence in late 1990. The

Nama people, relatives of the Koisan people known as Bushman and Hottentots, gave their name both to the

coastal desert, the Namib, as well as the nation of

Namibia. The Namib Desert stretches from southern Angola to South

Africa. A coastal desert hugging the southern African

Atlantic coast, the Namib is a land of stark contrasts and unmatched beauty.

Dr. Gary Williams, curator in the Academy's department of invertebrate zool-

ogy and geology, was educated as a marine biologist and spent six years in southern Africa studying the isolated

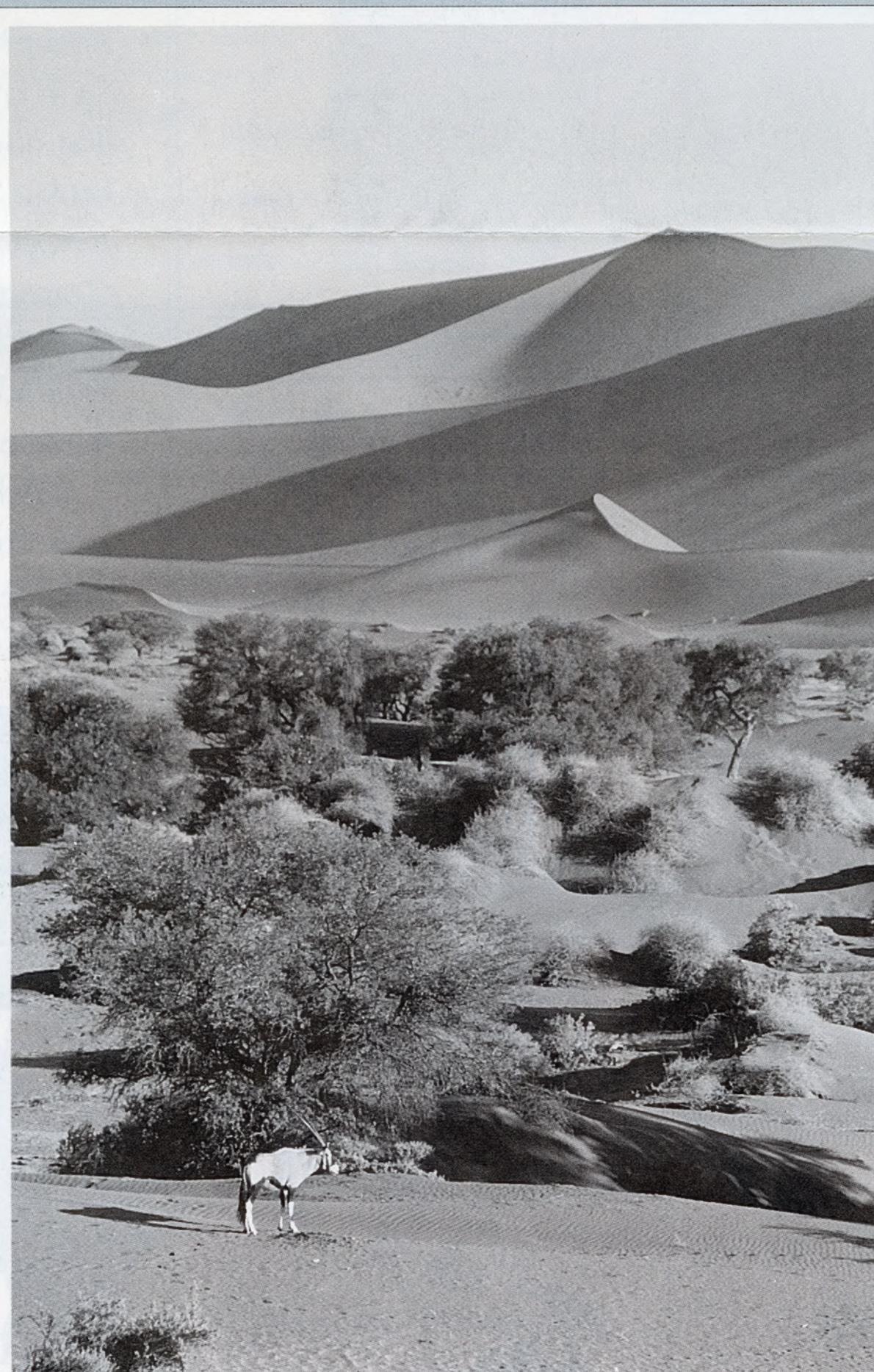
subcontinent. Williams will present a slide-illustrated lecture concerning the geological setting, Bushman rock

art, and unique flora and fauna of this fascinating region.

A land of fewer than one million people in an area larger than France, Namibia is a region of aridity, clean air, dirt roads, and small towns — from the Skeleton Coast with desert canyons and huge sand dunes, to the savanna-covered interior plateau with spectacular wildlife in places such as Etosha National Park.

When attending this lecture please present your membership card at the Academy entrance and again at the Morrison Auditorium. This

members meeting is provided as a benefit of your membership and is only open to Academy members.



**Members Meeting — With Dr. Gary Williams,
Curator, Invertebrate Zoology and Geology**

MORRISON PLANETARIUM

THE BIG BANG

AND THE JUDAIC-CHRISTIAN IDEA OF CREATION

In the beginning . . . the Universe began. Both scientists and theologians have long debated the origins of the universe. Could it have begun 20 billion years ago in a cataclysmic event known as the Big Bang? Join Dr. George V. Coyne, S.J., astronomer and director of the Vatican Observatory, in exploring this provocative question.

Jan. 25, 7:30 pm; Tickets \$2 each

This lecture is part of the Exploring the Universe Series. For advance tickets, use order form. Tickets available at the door on a standby basis. Call 750-7141, for more information.

ORION RENDEZVOUS:

A STAR TREK VOYAGE OF DISCOVERY

Imagine you're a cadet with the United Federation of Planets' Starfleet and are about to take a bold voyage into the final frontier. There you'll view galactic wonders, experience the scorching radiation of an exploding star and visit the birthplace of stars! This show features the voice of LeVar Burton as Geordi LaForge from "STAR TREK®: The Next Generation."

The show opens Jan. 14 and closes June 12th, and is shown daily at 2 pm with additional shows at 4 pm on weekends.

1994 ALMANAC

Preview the year to come with a look at 1994's heavenly highlights. In addition to this year's two solar eclipses, astronomers predict a potentially spectacular meteor show and the impact of a comet on the planet Jupiter. The show opens Jan. 14 and closes Mar. 2. Show times are at 1 and 3 pm on weekends.

CURRENT SKY SHOWS

The Planetarium will be closed Jan. 10-13 for a show change and will reopen on Jan. 14 with the two new shows mentioned above.

The sky shows through Jan. 9 (prior to this closure) include our special holiday show, "The Christmas Star," at 2 pm weekdays and 4 pm weekends. Additional shows on the weekend: "Galileo's Universe" at 1 and 3 pm; "Startalk" at 12 pm; and "Touch the Stars," our special family show, at 11 am.

When the Planetarium reopens on the 14th with the new shows (see above for times), other weekend shows for the rest of the month include "Touch the Stars" at 11 am and "Startalk" at 12 pm.

YOUNG AUDIENCES



African Roots of Jazz

In a magnetic performance that traces the evolution of the drum from its earliest beginnings in Africa to its influence on contemporary Western music, E.W. Wainwright and Phavia Kujichagulia will enchant you with their dance, song and poetic/historical perspective. *Sunday, Jan. 30*

This family series occurs one Sunday per month until June, at 1 pm in the Morrison Auditorium and is free after admission to the Academy. For more information, call 863-1719.

ADULT EDUCATION

Caribbean Carnival Costumes

It's almost time for Mardi Gras! Gloria Toolsie is an award-winning Carnival costume designer and has lots of new costumes to discuss with you. She'll share her knowledge of the history, materials and construction techniques behind the fabulous showpieces you see at Mardi Gras and San Francisco's own Carnival.

Jan. 8, 2-4 pm
\$12 members/\$15 nonmembers

The Amazon: The Environment, Biota and Humans

Join Dr. Carl Ferraris for a look at the unique combination of geologic and atmospheric conditions responsible for the creation of the vast tropical Amazon rainforest. You'll learn about the plant and animal life that evolved here and the extensive interplay among species that is so important to the health of the forest.

Jan. 13 to 27
(3 Thursdays), 7-9 pm
\$35 members/\$45 nonmembers

Preregistration required. For more information on these and other December offerings, call 750-7100.

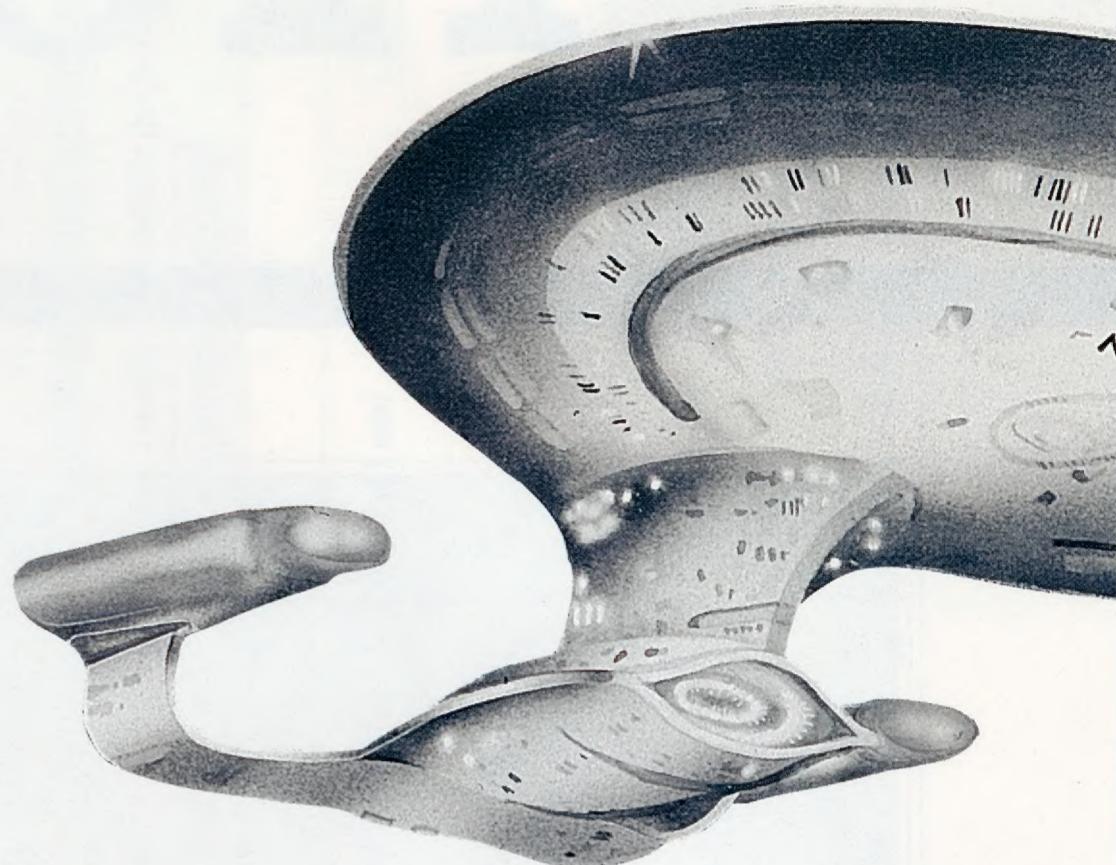
foods FOR THE FUTURE

The Academy and The Rietz Food Technology Foundation present a one-day food symposium: Saturday, March 5, 9 am to 7 pm. To order tickets, use coupon on back page. For more information, call 750-7163.



STAR TREK

FEDERATION



© 1993 Dawn Evans Scattreto

Museum visitors will have an opportunity to "go before" when the Academy shows "Star Trek: Federation Science." This \$1 million exhibit displays and covers over 6,000 square feet in several theme areas which will portray the *Enterprise*. A thematic representation of "The Bridge" will be the focus of the exhibit. Work stations, including communication and other science areas will be included. As visitors explore "The Bridge," they will find themes relating to other areas of the *Enterprise*, such as "Engineering" and "Sickbay." A simulated "Transporter Room" will give visitors an opportunity to experience being "beamed down" to a different world. In addition, visitors can travel through an asteroid field, program a voice-activated computer, tour the *Enterprise* starship.

Exhibits related directly to astronomy and planetology will be included in the "Galaxy" area. Throughout the exhibit, visitors will see original Star Trek artifacts, including tricorders, phasers, communicators, life-size alien models and more.



Exhibit designers concentrated on the basic scientific principles of practical astronomy and physiology that will be important to scientists in the future. In addition, visitors will learn about life support systems, medical science and life sciences research such as the structure of the human body and planetology.

Admission into the exhibit is free for Academy members. Non-members may purchase tickets after general admission to the Academy. The exhibit will be open from 10 am to 5 pm. Call the Academy's admission office at 750-7159 for ticket information.

Presented by  **Bank of America**

TO BOLDLY GO... EXPLORING FEDERATION SCIENCE

Beam Aboard: Special Viewing for Members

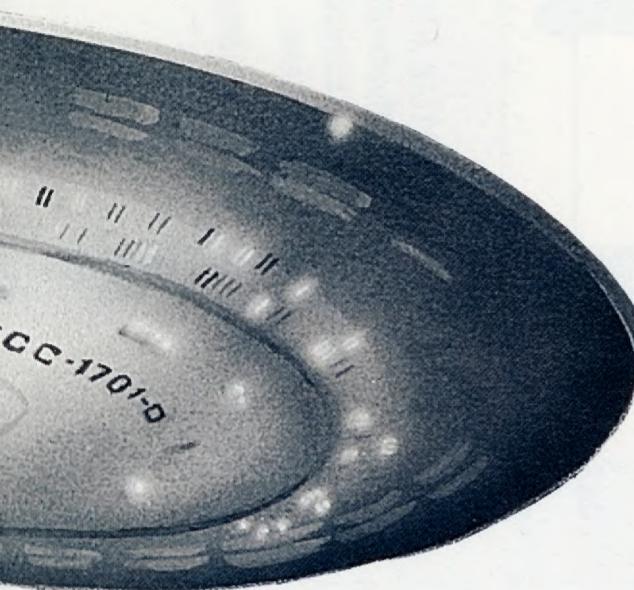
Members are invited to a special viewing of "Star Trek: Federation Science," March 28 and 29, and April 18 and 19, between the hours of 6-9 pm. If you cannot attend one of these special viewings the best time to visit the exhibit would be in the afternoon on weekdays.

If you plan to view the exhibit during regular public hours, you'll need to pick up a "STAR TREK BOARDING PASS" at the membership booth in Cowell Hall as the exhibit will be time-ticketed. Your guest passes will allow

TM® and © 1992
Generation One
Created and Cint

your friends
have to
Tickets
member
Star Tre
If you're
help in
associat
anticipa
years ar
(but the
well). C
to sign

Last call for applicants for the 1994 Highlight Docent Training Course.



OPENING
FEBRUARY 5
THROUGH MAY 1

city "to boldly go where no one has
vases the major exhibit, STAR TREK®:
exhibit includes over 40 modular
feet. The exhibit is divided into
y science as related to the *Starship*
ll be the central
cations, naviga-
tors leave "The
s of the U.S.S.
nulation of the
see themselves



in, guests can navigate through an
n into a Klingon, and command a

will be located in a special science
Trek artifacts, including costumes,
and scenes from favorite episodes.
incipals, including particle physics,
, that are expected to challenge
the principles behind propulsion
support will be intertwined with
the galaxy, orbits, relativity, and

members and \$1 for nonmembers
be time-ticketed for all. Please call
information.

Paramount Pictures. All rights reserved. STAR TREK and STAR TREK: The Next
registered trademarks of Paramount Pictures. STAR TREK: Federation Science was
created by the Oregon Museum of Science and Industry, Portland, Oregon.

ATION SCIENCE

ends into the Academy, but they will
ay admission to enter the exhibit.
or your guests will be available at the
ship booth for \$1.

rk's Guiding Light
a fan of Star Trek, we can use your
assisting with programs and logistics
ed with the Star Trek exhibit. We
e a need for many volunteers, 16
d older, especially for weekdays
re will be weekend opportunities as
all Volunteer Services at 750-7154
up.

TRADITIONAL ARTS

Chinese Brush Painting

You Shan Tang, a graduate in Fine Arts from Beijing University, demonstrates the various styles of Chinese calligraphy and brush painting. — Jan. 8

California Indian Dolls

Sarah Gregory discusses the natural materials used by California Indians to make tribal dolls, as well as their cultural and historical significance. She illustrates with examples from her family's collection of 1,500 ethnic dolls from around the world. — Jan. 15

Persian Music

Orchestra Parvaneh performs Persian classical and folk music on a *santur* (a 72-stringed hammered dulcimer), *zarb* (wood drum) and violin. — Jan. 29

Hawaiian Canoe Carver

Daily Jan. 19 to 23
10 am-5 pm, Cowell Hall
Hawaiian boat builder Peter Balin will hand carve miniature canoes and replicas of traditional Polynesian outrigger canoes.

Explore cultural traditions from around the world, Saturdays at 1 pm. Free after general admission.

DISCOVER A WORLD OF DIFFERENCE WITH ACADEMY TRAVEL. FOR ITINERARIES, CALL 750-7348.



LECTURES

Signs of Life:

The Language and Meanings of DNA

Join Robert Pollack for a discussion about the complex meanings of the living text called DNA

January 11, 7:30 pm

\$6 members/\$8 nonmembers

Ancestors: In Search of Human Origins

Dr. Donald Johanson, president of the Institute of Human Origins and discoverer of "Lucy," the oldest, human ancestor, will discuss his recent fossil hunts in Ethiopia and will preview his new series of

NOVA television programs that air beginning Feb. 28.

Following the lecture and a special NOVA screening, there will be a signing of "Ancestors," the series companion book that Johanson coauthored with Lenora Johanson and Blake Edgar of the Academy's "Pacific Discovery" magazine.

February 24, 7:30 pm
\$6 members/\$8 nonmembers

Lectures are presented in the Morrison Auditorium by experts in various aspects of natural history. Please use coupon to order tickets, or call 750-7128.

Kayaking the Full Moon:

A Journey Down the Yellowstone

Steve Chapple reflects upon his experiences along the longest undammed and unspoiled river in the United States.

January 25, 7:30 pm

\$6 members/\$8 nonmembers

Science: The Final Frontier

THE CLAIRE MATZGER LILIENTHAL DISTINGUISHED LECTURE SERIES

Space flight causes loss of bone and calcium in humans exposed to microgravity. The cause of this space osteoporosis is just now being found by dedicated medical space shuttle missions.

In June of 1991, Dr. Millie Hughes-Fulford flew on Columbia for nine days, becoming the first civilian woman scientist astronaut. She was also a crew member on NASA's first medical mission, SLS-1 investigating microgravity induced changes in humans. She will share her knowledge of space physiology and the adventure of space flight.

Find out about the future of molecular medicine and the new miracles of tomorrow.

March 9

6 pm Reception/Lecture:
\$30 members/\$35 nonmembers
7:30 pm Lecture only: \$6 members/\$8 nonmembers

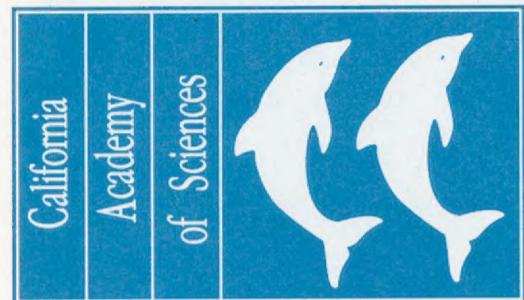


Call the Volunteer Office, 750-7145, for information.

COUPON FORM

California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

Address Correction Requested



The Academy includes the Natural History Museum, Steinhart Aquarium and Morrison Planetarium. Open every day of the year from 10 am to 5 pm.

VISITOR SERVICES

Academy Information: 415-750-7145
Academy Store: 750-7330
Admissions: 750-7159
Aquarium: 750-7247

Biodiversity Resource Center:

750-7361
Development Office: 750-7216
Education Office: 750-7100
Group Information: 750-7043
Job Hotline: 750-7333

Laserium: 750-7138
Lectures: 750-7128
Library: 750-7102
Lost and Found: 750-7150
Membership Office: 750-7111
Planetarium: 750-7141
Planned Giving: 750-7216
Security: 750-7000
Switchboard: 221-5100
Travel: 750-7348
Volunteer Services: 750-7375
Weekend Information: 750-7375

Box lunch, regular
Box lunch, vegetarian

DONATIONS

I would like to support the Academy's work with a donation.

TOTAL PAYMENT ENCLOSED

PAYMENT METHOD

VISA Check MasterCard American Express
Credit card charges gladly accepted over \$10.

Card# Exp. Date

The Academy Newsletter is published monthly for Academy members.

Editor / Sheri Ketchum
Design / Nancy Campana Design
Printing / Fruitridge Printing & Lithograph Inc.

Printed on Recycled Paper
with Soy-based Ink 

Include a S.A.S.E. for each series for which you subscribe. No refunds/exchanges.

FERENGIS AND KLINGONS AND BORGs, OH MY!

Illustrated with photographs and drawings relating to Star Trek fiction and science fact, the "Exhibition Guide," a 60-page booklet with a 3-D viewer, will help you explore our new exhibit's



science wonders. Price \$9.95. The "Teacher's Guide" that will enhance school field trips to STAR TREK®: Federation Science. It includes classroom pre-exhibit and post-exhibit activities. Price \$12.95.

JANUARY

SUNDAY

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

FEBRUARY DATES TO REMEMBER:

STAR TREK®: Federation Science exhibit opens, Feb. 5
Conversations at the Herbst Theatre, Sue Hubbell, Feb. 7
Lectures, "Ancestors: In Search of Human Origins," Feb. 24

CURRENT EXHIBITS:

Hands On Science, through Sept. 5
Birds of a Feather, through Sept. 5
Jurassic!, through Feb. 6

EARTH CELEBRATIONS

This month's childrens program: Wetlands, Saturdays 12:30 and 3 pm

2

3
PLANETARIUM SKY SHOWS
on weekdays at 2 pm

9

The Sky Shows, "Galileo's Universe" and "The Christmas Star" close (Planetarium)

16

LASERIUM SHOWS
Thursday-Sunday, evenings, call 750-7138 (no membership discount)

23



30

African Roots of Jazz, 1 pm (Young Audiences)

4

11 Signs of Life: The Language and Meanings of DNA, 7:30 pm (Lectures)

18

25 Kayaking the Full Moon, 7:30 pm (Lectures)

5

Free Day
First Wednesday of each month



12 Namibia - A Natural History of Africa's Newest Nation, 2 and 7:30 pm (Members Meeting)

19

Hawaiian Canoe Carver, through the 23rd, 10 am to 5 pm, (Traditional Arts)

26

DOLPHIN FEEDINGS
are at 10:30 am, and 12:30, 2:30 and 4:30 pm every day

6

SPECIALTY TOURS
Free one-hour tour: Tuesdays - Aquarium; Wednesdays - Life Through Time; Thursdays - Wild California; all at 1:30 pm

13



FISH ROUNDABOUT FEEDINGS
are at 2 pm every day

20

27



UPCOMING MEMBERS MEETINGS:

Feb. 9, "Gardening in the Fog Belt," with Pam Peirce
Mar. 9, "I Never Promised You a Rain Forest," with Douglas Cheeseman, Jr.
Apr. 13, "A Society of Wolves," with Rick McIntyre
May 11, "40 Years of Everest," with Norbu Tenzing Norgay

7

14

Planetarium reopens with "Orion Rendezvous" and "1994 Almanac" (Planetarium)

21

Docent Training Orientation, 1:30 pm (Volunteer Services)

28



Persian Music, 1 pm (Traditional Arts)

1



8

Chinese Brush Painting, 1 pm (Traditional Arts)

15

California Indian Dolls, 1 pm (Traditional Arts)

22

PENGUIN FEEDINGS
are at 11:30 am and 4 pm every day

29

Persian Music, 1 pm (Traditional Arts)